

ABSTRACT OF THE DISCLOSURE

A method for increasing the control response of a drive train of a machine tool or production machine with backlash and/or elasticity is described. A combined signal comprised of the motor speed measured on the motor and the load speed measured near the load of the drive train is supplied to a controller. The combined signal can generated in one of two ways: (1) by weighting the measured motor speed with a first multiplication factor (α), by weighting the measured load speed with a second multiplication factor ($1-\alpha$), and by subsequently adding the weighted motor speed to the weighted load speed; or (2) by first subtracting the measured load speed from the measured motor speed, then weighting the resulting difference by a multiplication factor α , and finally adding the load speed to the weighted difference.